UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,385	01/30/2006	Tetsuya Bono	126308	5512

25944 7590 06/16/2010

OLIFF & BERRIDGE, PLC
P.O. BOX 320850
ALEXANDRIA, VA 22320-4850

EXAMINER	
WOOD, JARED M	

ART UNIT	PAPER NUMBER
1793	

NOTIFICATION DATE	DELIVERY MODE
06/16/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com
jarmstrong@oliff.com

Office Action Summary	Application No.	Applicant(s)	
	10/566,385	BONO, TETSUYA	
	Examiner	Art Unit	
	JARED WOOD	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 June 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/03/2010 has been entered.

Status of claims

Claim 9 is cancelled. Claim 1 is currently amended. Claims 1-8 are currently pending for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2002-352837 (Kazuo).

As to claims 1, Kazuo discloses a fuel cell system which comprises a fuel cell stack (abstract), a load device (¶ 0005), a fuel gas feeder (¶ 0039) and air supply equipment (¶ 0043)

(gas supply unit), an anode and a cathode (¶ 0002) which receive fuel gas and oxidizing gas respectively from the fuel gas feeder and the air supply equipment, a control section (¶ 0038), and a supply pressure limiting valve (¶ 0040) and an exhaust gas pressure control valve (¶ 0045). Kazuo discloses the inclusion of a voltage sensor in his fuel cell system (¶ 0063) configured to sense the output voltage of the fuel cell stack (across the anode and cathode of the fuel cell) which sensor is configured also to provide data to the control section (¶ 0063). Kazuo discloses a number of pressure sensors located in the fuel supply and return lines (¶ 0039 and 0041) which provide data to the control section. Claim 1 further contains functional limitations for many components especially those of the gas permeation quantity estimation unit and the correction unit. Applicant is reminded that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). The structural prior art features, though not disclosed to be used in the manner suggested by applicant, are nevertheless capable of performing the claimed functions.

As to claims 2 and 3, although the limitations of claims 2 and 3 contain only functional limitations which could be performed by the above listed prior art system, these functional limitations do imply the need for a voltage sensor to detect the voltage output of the fuel cell stack. Kazuo discloses the inclusion of a voltage sensor in his fuel cell system (¶ 0063).

As to claims 4 and 5, although the limitations of claims 2 and 3 contain only functional limitations which could be performed by the above listed prior art system these, functional limitations do imply the need for a pressure sensor located in the fuel supply line to detect the

fuel gas pressure. Kazuo discloses a number of pressure sensors located in the fuel supply and return lines (¶ 0039 and 0041).

As to claims 6-8, these claims contain only functional limitations. Applicant is reminded that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). The structural prior art features, though not disclosed to be used in the manner suggested by applicant, are nevertheless capable of performing the claimed functions.

Response to Arguments

Applicant's arguments filed 06/03/2010 have been fully considered but they are not persuasive. Applicant has argued on page 5 that Saito does not disclose that the controller controls based upon the first and second detectors. As set forth in the previous office action, Saito's fuel cell system does indeed comprise voltage and pressure sensors which correspond to applicant's claimed detectors. Furthermore, Saito positively discloses that the controller makes control decision based upon the input form the voltage and pressure sensors in at least paragraphs 0063 and 0042 respectively.

Applicant further argues on page 6, that the examiner has misapplied In re Schreiber in the examiner's treatment of the functional limitations of applicant's claims. Applicant cites that Schreiber only is pertinent to an intended use of a known product or apparatus. However functional limitations in apparatus claims are precisely an intended use of the claimed apparatus. Schreiber affirms that in apparatus claims, the prior art apparatus need only be capable of

performing the intended function in order to meet the limitations based upon a particular function of the apparatus.

Finally applicant states that the previous office action acknowledges that the control section disclosed by Saito is a completely different controller than that recited in claim 1. It is unclear how applicant has arrived at this determination. In no way did the examiner state, affirm, acknowledge, or even suggest any such thing. It is clear from the previous action and remarks by the examiner that Saito discloses the same structure as that claimed by applicant and that Saito's structure is inherently capable of performing the functions claimed by applicant.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JARED WOOD whose telephone number is (571)270-5911. The examiner can normally be reached on Monday - Friday, 7:30 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JARED WOOD/
Examiner, Art Unit 1793

/J.A. LORENGO/
Supervisory Patent Examiner, Art Unit 1793